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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,467	04/05/2002	Uwe Manz	33806W005	5846

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SMITH, GAMBRELL & RUSSELL, LLP  
1850 M STREET, N.W., SUITE 800  
WASHINGTON, DC 20036

EXAMINER

WONG, EDNA

ART UNIT	PAPER NUMBER
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1753

DATE MAILED: 04/03/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/009,467

Applicant(s)

MANZ ET AL.

Examiner

Edna Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

***Claim Rejections - 35 USC § 112***

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1

lines 2-6, the words “containing”, “and also at least” and “characterized in that, the bath contains” all introduce the components of the acid bath. It is unclear what the positive bath components are.

line 13-18, it is unclear if the limitation of “also an aryl or heteroaryl group with up to 10 carbon atoms, which may be optionally substituted once or several times with straight-chain or branched alkyl groups with 1 to 14 carbon atoms” follows only in the event that  $m = 4$ .

Claim 2

lines 2-3, the words “characterized in that, it contains” are not further limiting. It is suggested that the words “characterized in that, it contains” be amended to the words -- further containing --.

line 2, 3, it appears that “a further gloss additive” is the same as that recited in claim 1, line 6. However, it is unclear if it is.

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lines 3-4, it appears that the "at least one compound" is the same as that recited in claim 1, lines 6-7. However, it is unclear if it is. If it is, then it is suggested that the word -- the -- be inserted after the word "additive".

lines 6-7, the phrase "preferably a branched alkyl group with 6 to 10 carbon atoms" is indefinite.

#### Claim 3

line 2, the words "characterized in that, it contains" are not further limiting. It is suggested that the words "characterized in that, it contains" be amended to the words -- further containing --.

line 2, it appears that "a further gloss additive" is the same as that recited in claim 1, line 6. However, it is unclear if it is.

#### Claim 4

line 2, the words "characterized in that, it contains" are not further limiting. It is suggested that the words "characterized in that, it contains" be amended to the words -- further containing --.

lines 2-3, the phrase "preferably 0.1 to 5 g/l" is indefinite.

lines 2-3, it appears that "a compound" is the same as that recited in claim 1, lines 6-7. However, it is unclear if it is. If it is, then it is suggested that the word -- the -- be inserted after the word "additive".

Claim 5

lines 7-12, it is unclear if the limitation of "also an aryl or heteroaryl group with up to 10 carbon atoms, which may be optionally substituted once or several times with straight-chain or branched alkyl groups with 1 to 14 carbon atoms" follows only in the event that  $m = 4$ .

Claim 6

lines 2-3, it is unclear what the positive process steps are. It is suggested that the words "deposition takes place" be amended to the word -- electrodepositing --.

line 3, the phrase "preferably 4 to 5" is indefinite.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 5 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 5 is directed to the "use". The "use" is a non-statutory subject matter.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Bath Composition***

I. Claims **1 and 4** are rejected under 35 U.S.C. 102(b) as being anticipated by **CH 629,258**.

The CH reference teaches an acid bath for the electrodeposition of glossy gold alloy layers containing:

- (a) gold (= alkali or ammonium aurocyanide);
- (b) one or more alloy elements in dissolved form (= Ni and/or Co as water-soluble compounds);
- (c) at least one organic compound as a gloss additive (= aromatic and/or aliphatic sulphonic or sulphuric acid); and
- (d) as a further gloss additive, at least one compound of the general formula:



in which

**m** is the number 3,

**R** is an optionally substituted aliphatic, aromatic or cyclic group,

**X** is H, SH, SO<sub>3</sub>H, SR<sub>1</sub>, SR<sub>2</sub>-SO<sub>3</sub>H (R<sub>1</sub> and R<sub>2</sub> are as R, and when

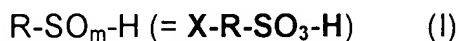
R is an aliphatic group, then X can also be (amino)heterocyclyl) [abstract].

The bath contains 0.01 to 10 g/l of the at least one compound of the general formula I (= 5 mg-10 g per l) [abstract].

#### *Use*

II. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by **CH 629,258**.

The CH reference teaches a use of compounds of the general formula:



in which

**m** is the number 3,

**R** is an optionally substituted aliphatic, aromatic or cyclic group,

**X** is H, SH, SO<sub>3</sub>H, SR<sub>1</sub>, SR<sub>2</sub>-SO<sub>3</sub>H (R<sub>1</sub> and R<sub>2</sub> are as R, and when

R is an aliphatic group, then X can also be (amino)heterocyclyl) [abstract].

as further gloss additives in acid baths for the electrodeposition of glossy gold alloy layers containing gold (= alkali or ammonium aurocyanide) and one or more alloy elements in dissolved form (= Ni and/or Co as water-soluble compounds) and also at least one organic compound as a gloss additive (= aromatic and/or aliphatic sulphonic or sulphuric acid) [abstract].

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*Process*

III. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by CH 629,258.

The CH reference teaches a process for the electrodeposition of glossy gold alloy layers, characterized in that:

deposition takes place from a bath in accordance with Claim 1 at a pH in the range of 3 to 6 (= 3-5) [abstract].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

*Bath Composition*

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over CH 629,258 as applied to claims 1 and 4 above.

The CH reference is as applied above and incorporated herein.

The CH reference does not teach wherein R is a straight-chain or branched alkyl group with 5 to 12 carbon atoms; and wherein the compounds are pentyl sulfonate, ... or their isomers.



However, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made because one skilled in the art would have been motivated to have modified the electrodeposition bath of the CH reference with wherein R is a straight-chain or branched alkyl group with 5 to 12 carbon atoms; and wherein the compounds are pentyl sulfonate, ... or their isomers because the CH reference teaches that the brightener is an aliphatic sulphonic or sulphuric acid (abstract). Although a straight-chain group of 3 carbons is disclosed (e.g., 1-propene-3-sulfonic acid), this is only exemplary and the teachings would have suggested that one skill in the art would have been able to determine the number of carbons in the aliphatic sulphonic or sulphuric acid that would have successfully carried out the electrodeposition of the glossy gold alloy layers.

Furthermore, 5 carbons atoms is only 2 more than that disclosed in the CH reference (i.e., propene/propane). No significance is seen between them.

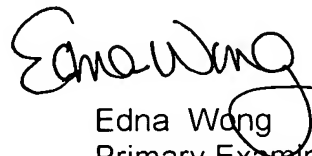
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edna Wong whose telephone number is (703) 308-3818. The examiner can normally be reached on Mon-Fri 7:30 am to 5:00 pm, alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (703) 308-3322. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310

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for regular communications and (703) 873-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1495.

A handwritten signature in black ink, appearing to read "Edna Wong". The signature is stylized with a large, looping "E" and a cursive "Wong".

Edna Wong  
Primary Examiner  
Art Unit 1753

EW  
April 2, 2003